ABSTRACT OF THE DISCLOSURE

In a rectifying circuit, a rectifying diode is configured to rectify a first AC voltage to output a first DC voltage. A protection diode circuit has constant reverse voltage diodes and electrically connected to the rectifying diode in parallel thereto. The constant reverse voltage diodes are electrically connected to each other in series. Each of the constant reverse voltage diodes has a breakdown voltage and a second forward voltage. A sum of the breakdown voltages of the constant reverse voltage diodes is lower than the breakdown voltage of the rectifying diode, and a sum of said second forward voltages is higher than the first forward voltage of the rectifying diode.